

R44 I/R44 Cadet SAFETY ALERT

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ENGINE INTAKE VALVES

RHC has received recent reports of burned intake valves on O-540-F1B5 engines installed in R44 Raven I and R44 Cadet helicopters. A burned valve can result in partial or complete loss of power.

For some reports, the pilot noticed engine roughness or a sudden momentary left yaw during flight, and a mechanic was able to diagnose the burned valve using a compression check prior to more significant symptoms.

All reported burned intake valves occurred on engines with serial numbers ending in "40E", and almost all had less than 500 hours time-in-service.

Pilots should observe the following precautions:

- 1. Perform a complete run up and stabilized hover check prior to every flight. Do not initiate flight if there is any indication of engine roughness or sudden yaw.
- 2. If engine roughness or a sudden yaw occurs in flight, land as soon as practical and be prepared to land immediately.
- 3. Following any engine roughness or a sudden yaw, have a mechanic check valve condition before further flight. The mechanic should listen for sound of leakage at each intake valve while performing a compression check. Any intake valve with audible leakage requires repair prior to further flight. Check may be done with engine hot or cold.